

## DECLARATION FOR PATENT APPLICATION

As a below named inventor, I declare that I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

### **97 Human Secreted Proteins**

the specification of which [ ] is attached hereto or was filed on September 10, 2001 as Application Serial No. 09/948,783 and was amended on \_\_\_\_\_ (if applicable).

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I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application, which designated at least one country other than the United States listed below, and have also identified below any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed. Prior Foreign Application(s):

(Number)	(Country)	(Day/Month/Year Filed)	Priority Claimed	
			Yes	No

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below:

Appln Serial No.	Filing Date	Appln Serial No.	Filing Date
60/231,846	11 September 2000	60/985,920	18 May 1998
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(Application Serial No.)	(Filing Date)	(Status: patented, pending, abandoned)
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Full name of additional joint inventor: Kimberly A. Florence

Inventor's signature: *Kimberly A. Florence* Date: 2/25/02

Residence: 12805 Atlantic Avenue, Rockville, MD 20851 Citizenship: US

Post Office Address: same as above


Full name of additional joint inventor: Jian Ni

Inventor's signature:  Date: 2/27/02

Residence: 17815 Fair Lady Way, Germantown, MD 20874 Citizenship: CN

Post Office Address: same as above

Full name of additional joint inventor: Craig A. Rosen

Inventor's signature:  Date: 2/27/02

Residence: 22400 Rolling Hill Road, Laytonsville, MD 20882 Citizenship: US

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Full name of additional joint inventor: Kenneth C. Carter

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: 11600 Brandy Hall Lane, North Potomac, MD 20878 Citizenship: US

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Full name of first joint inventor: Paul A. Moore  
Inventor's signature: Paul Moore Date: 2/27/02  
Residence: 19005 Leatherbark Drive, Germantown, MD 20874 Citizenship: UK  
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Full name of additional joint inventor: Henrik S. Olsen  
Inventor's signature: Henrik Olsen Date: 2/27/02  
Residence: 182 Kendrick Place, #24, Gaithersburg, MD 20878 Citizenship: DK  
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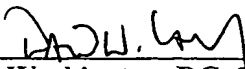
Full name of additional joint inventor: Yanggu Shi  
Inventor's signature: Yanggu Shi Date: 2/27/02  
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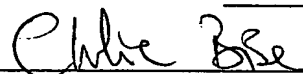
Full name of additional joint inventor: Laurie A. Brewer  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 410 Van Dyke Street, Apt. 115, St. Paul, MN 55119 Citizenship: US  
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Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
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Residence: 184 Federal Street, Florence, MA 01062 Citizenship: US  
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Full name of additional joint inventor: Reinhard Ebner  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 9906 Shelburne Terrace, # 316, Gaithersburg, MD 20878 Citizenship: DE  
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Full name of additional joint inventor: Charles E. Birse  
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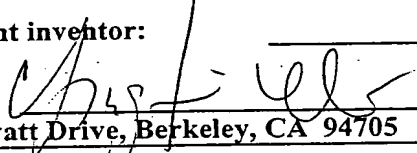
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Post Office Address: same as above

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Inventor's signature:  Date: 2/28/02  
Residence: 242 Gravatt Drive, Berkeley, CA 94705 Citizenship: US  
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Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: 184 Federal Street, Florence, MA 01062 Citizenship: US

Post Office Address: same as above

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### **97 Human Secreted Proteins**

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Yes No

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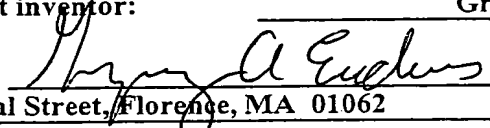
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Post Office Address: same as above

Full name of additional joint inventor: Kimberly A. Florence  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 12805 Atlantic Avenue, Rockville, MD 20851 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: Jian Ni  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 17815 Fair Lady Way, Germantown, MD 20874 Citizenship: CN  
Post Office Address: same as above

Full name of additional joint inventor: Craig A. Rosen  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 22400 Rolling Hill Road, Laytonsville, MD 20882 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: Kenneth C. Carter  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 11600 Brandy Hall Lane, North Potomac, MD 20878 Citizenship: US  
Post Office Address: same as above

Full name of first joint inventor: Paul A. Moore  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 19005 Leatherbark Drive, Germantown, MD 20874 Citizenship: UK  
Post Office Address: same as above

Full name of additional joint inventor: Henrik S. Olsen  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 182 Kendrick Place, #24, Gaithersburg, MD 20878 Citizenship: DK  
Post Office Address: same as above

Full name of additional joint inventor: Yanggu Shi  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 437 West Side Drive, Apt. 102, Gaithersburg, MD 20878 Citizenship: US  
Post Office Address: same as above

Full name of first named inventor: Paul E. Young  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 122 Beckwith Street, Gaithersburg, MD 20878 Citizenship: US  
Post Office Address: same as above

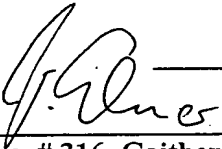
Full name of additional joint inventor: Ying-Fei Wei  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 242 Gravatt Drive, Berkeley, CA 94705 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: Laurie A. Brewer  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 410 Van Dyke Street, Apt. 115, St. Paul, MN 55119 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: Daniel R. Soppet  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 15050 Stillfield Place, Centreville, VA 20120 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: David W. LaFleur  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 3142 Quesada Street, N.W., Washington, DC 20015 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: Gregory A. Endress  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 184 Federal Street, Florence, MA 01062 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: Reinhard Ebner  
Inventor's signature:  Date: 2/23/02  
Residence: 9906 Shelburne Terrace, # 316, Gaithersburg, MD 20878 Citizenship: DE  
Post Office Address: same as above

Full name of additional joint inventor: Charles E. Birse  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 13822 Saddlevue Drive, North Potomac, MD 20878 Citizenship: UK  
Post Office Address: same as above





UNITED STATES  
PATENT AND  
TRADEMARK OFFICE

JUNE 10, 2002

PTAS

HUMAN GENOME SCIENCES, INC.  
JANET M. MARTINEAU  
9410 KEY WEST AVENUE  
ROCKVILLE, MD 20850



RECEIVED

JUN 14 2002

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HGS PATENT DEPT.

Chief Information Officer  
Washington, DC 20231  
www.uspto.gov



\*102056458A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 04/09/2002

REEL/FRAME: 012780/0534  
NUMBER OF PAGES: 18

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

RUBEN, STEVEN M.

DOC DATE: 02/27/2002

ASSIGNOR:

FLORENCE, KIMBERLY A.

DOC DATE: 02/25/2002

ASSIGNOR:

NI, JIAN

DOC DATE: 02/27/2002

ASSIGNOR:

ROSEN, CRAIG A.

DOC DATE: 02/20/2002

ASSIGNOR:

CARTER, KENNETH C.

DOC DATE: 02/24/2002

ASSIGNOR:

MOORE, PAUL A.

DOC DATE: 02/27/2002

ASSIGNOR:

OLSEN, HENRIK S.

DOC DATE: 02/27/2002

012780/0534 PAGE 2

ASSIGNOR:  
SHI, YANGGU

DOC DATE: 02/27/2002

ASSIGNOR:  
YOUNG, PAUL E.

DOC DATE: 02/26/2002

ASSIGNOR:  
WEI, YING-FEI

DOC DATE: 02/28/2002

ASSIGNOR:  
BREWER, LAURIE A.

DOC DATE: 02/26/2002

ASSIGNOR:  
SOPPET, DANIEL R.

DOC DATE: 02/22/2002

ASSIGNOR:  
LAFLEUR, DAVID W.

DOC DATE: 02/27/2002

ASSIGNOR:  
ENDRESS, GREGORY A.

DOC DATE: 02/28/2002

ASSIGNOR:  
EBNER, REINHARD

DOC DATE: 02/23/2002

ASSIGNOR:  
BIRSE, CHARLES E.

DOC DATE: 02/24/2002

ASSIGNEE:  
HUMAN GENOME SCIENCES, INC.  
9410 KEY WEST AVENUE  
ROCKVILLE, MARYLAND 20850

SERIAL NUMBER: 09948783  
PATENT NUMBER:

FILING DATE: 09/10/2001  
ISSUE DATE:

LAZENA MARTIN, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

04-16-2002

Form PTO-1595  
(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)

U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

102056458

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof

## 1. Name of conveying party(ies):

Steven M. Ruben (February 27, 2002), Kimberly A. Florence (February 25, 2002), Jian Ni (February 27, 2002), Craig A. Rosen (February 20, 2002), Kenneth C. Carter (February 24, 2002).

Additional name(s) of conveying party(ies) attached?

☒ Yes☐ No

## 3. Nature of Conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ OtherExecution Date: see Box 1, conveying parties

## 2. Name and address of receiving party(ies)

Name: Human Genome Sciences, Inc.

Internal Address: \_\_\_\_\_

Street Address: \_\_\_\_\_

9410 Key West AvenueCity: RockvilleState: MDZip: 20850

Additional name(s) &amp; address(es) attached:

☐ Yes☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the new application is: \_\_\_\_\_

A. Patent Application No.(s):

09/948,783

B. Patent No.(s): \_\_\_\_\_

Additional numbers attached?

☐ Yes☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Janet M. Martineau  
HUMAN GENOME SCIENCES, INC.Street Address: 9410 Key West Avenue

City:

Rockville

State:

MD

Zip:

20850

## 6. Total number of applications and patents involved:

1

## 7. Total fee (37 CFR 3.41)

\$ 40.00☐ Enclosed☒ Authorized to be charged to deposit account

## 8. Deposit account number:

08-3425

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

## 9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*Janet M. Martineau - 46,903

Name of Person Signing

Signature

April 9, 2002

Date

Total number of pages including cover sheet, attachments, and documents: 18

04/15/2002 DBYRNE 00000150 083425 09948783

01 FC:581

40.00 CH

Serial No. 09/948,783

Page 1 of 2

Docket No.: PZ028P2

RECORDATION FORM COVER SHEET  
(continued)

## Additional Conveying Party(ies) (1. Continued):

Paul A. Moore (February 27, 2002), Henrik S. Olsen (February 27, 2002), Yanggu Shi (February 27, 2002), Paul E. Young (February 26, 2002), Ying-Fei Wei (February 28, 2002), Laurie A. Brewer (February 26, 2002), Daniel R. Soppet (February 22, 2002), David W. LaFleur (February 27, 2002), Gregory A. Endress (February 28, 2002), Reinhard Ebner (February 23, 2002), and Charles E. Birse (February 24, 2002)

## Additional Assignees (2. Continued):

Assignee Name: \_\_\_\_\_

Internal Address: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Assignee Name: \_\_\_\_\_

Internal Address: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Assignee Name: \_\_\_\_\_

Internal Address: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

## Additional Applications and/or Patents (4. Continued):

Additional Patent Application Numbers  
4A. Continued:Additional Patent Numbers  
4B. Continued:

Additional numbers attached?

☐

Yes

☒

No

## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Steven M. RUBEN, Kimberly A. FLORENCE, Jian NI, Craig A. ROSEN, Kenneth C. CARTER, Paul A. MOORE, Henrik OLSEN, Yanggu SHI, Paul E. YOUNG, Ying-Fei WEI, Laurie A. BREWER, Daniel R. SOPPET, David W. LAFLEUR, Gregory A. ENDRESS, Reinhard EBNER, and Charles E. BIRSE, hereby sells, assigns, transfers, and sets over to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his/her entire right, title and interest, including the right to sue and collect for all past, present and future damages, for the United States of America, including all its territories and possessions, and all other countries,

- (a) in and to the invention(s) known as 97 Human Secreted Proteins for which application(s) for patent in the United States of America has (have) been executed by the undersigned on \_\_\_\_\_ (also known as United States Application No. 09/948,783, filed September 10, 2001), in any and all applications thereon, in any and all Patent(s) therefor, and
- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing (continuation, divisional) applications, reissues, extensions, renewals and reexaminations of the patent application or patent therefor listed above in part (a), to the full extent of the term or terms for which patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals, and examinations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.


Each of the undersigned further agrees that said Assignee may apply for and receive patent(s) for said invention(s) in its own name; and agrees to execute all papers necessary in connection with said application(s) and any continuing application(s) (continuation, divisional, or continuation-in-part), substitutes, renewals, reissues, reexaminations, extensions, and all other patent applications on all such invention(s), including all rightful oaths, declarations, powers of attorney and other papers; and agrees to execute separate assignments in connection with such application(s) as the Assignee may deem necessary and expedient; and agrees to communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said invention(s) and the history thereof; and agrees to cooperate fully and completely with said Assignee, its successors, assigns, and representatives in securing, maintaining, and enforcing proper patent protection for said invention(s) and for vesting title to said invention(s) and all patent applications and all patents on said invention(s) in Assignee, its successors, assigns and representatives.

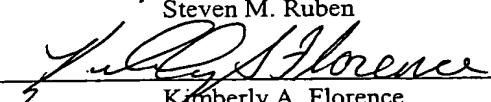
Each of the undersigned agrees to execute all papers necessary in connection with any interference that may be declared or litigation that may be instituted concerning the application(s) or patent(s) referred to above and to cooperate fully and completely with the Assignee, its successors, assigns, and representatives in obtaining evidence and going forward with such interference or litigation, including providing testimonial evidence.

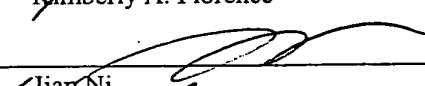
Each of the undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

Each of the Practitioners at Customer Number 22195 is hereby granted with full power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

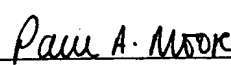
Inventor's Signature:  Date: 2/27/02  
Steven M. Ruben

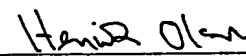
Inventor's Signature:  Date: 2/25/02  
Kimberly A. Florence

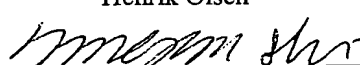
Inventor's Signature:  Date: 2/27/02  
Jian Ni

Inventor's Signature:  Date: 2/27/02  
Craig A. Rosen

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Kenneth C. Carter

Inventor's Signature:  Date: 2/27/02  
Paul A. Moore

Inventor's Signature:  Date: 2/27/02  
Henrik Olsen

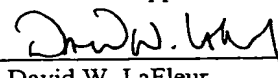
Inventor's Signature:  Date: 2/27/02  
Yanggu Shi

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Paul E. Young

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Ying-Fei Wei

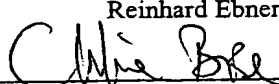
Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Laurie A. Brewer

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Daniel R. Soppet

Inventor's Signature:  Date: 2/27/02  
David W. LaFleur

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Gregory A. Endress

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Reinhard Ebner

Inventor's Signature:  Date: 2/27/02  
Charles E. Birse

## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Steven M. RUBEN, Kimberly A. FLORENCE, Jian NI, Craig A. ROSEN, Kenneth C. CARTER, Paul A. MOORE, Henrik OLSEN, Yanggu SHI, Paul E. YOUNG, Ying-Fei WEI, Laurie A. BREWER, Daniel R. SOPPET, David W. LAFLEUR, Gregory A. ENDRESS, Reinhard EBNER, and Charles E. BIRSE, hereby sells, assigns, transfers, and sets over to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his/her entire right, title and interest, including the right to sue and collect for all past, present and future damages, for the United States of America, including all its territories and possessions, and all other countries,

- (a) in and to the invention(s) known as 97 Human Secreted Proteins for which application(s) for patent in the United States of America has (have) been executed by the undersigned on \_\_\_\_\_ (also known as United States Application No. 09/948,783, filed September 10, 2001), in any and all applications thereon, in any and all Patent(s) therefor, and
- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing (continuation, divisional) applications, reissues, extensions, renewals and reexaminations of the patent application or patent therefor listed above in part (a), to the full extent of the term or terms for which patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals, and examinations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

Each of the undersigned further agrees that said Assignee may apply for and receive patent(s) for said invention(s) in its own name; and agrees to execute all papers necessary in connection with said application(s) and any continuing application(s) (continuation, divisional, or continuation-in-part), substitutes, renewals, reissues, reexaminations, extensions, and all other patent applications on all such invention(s), including all rightful oaths, declarations, powers of attorney and other papers; and agrees to execute separate assignments in connection with such application(s) as the Assignee may deem necessary and expedient; and agrees to communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said invention(s) and the history thereof; and agrees to cooperate fully and completely with said Assignee, its successors, assigns, and representatives in securing, maintaining, and enforcing proper patent protection for said invention(s) and for vesting title to said invention(s) and all patent applications and all patents on said invention(s) in Assignee, its successors, assigns and representatives.

Each of the undersigned agrees to execute all papers necessary in connection with any interference that may be declared or litigation that may be instituted concerning the application(s) or patent(s) referred to above and to cooperate fully and completely with the Assignee, its successors, assigns, and representatives in obtaining evidence and going forward with such interference or litigation, including providing testimonial evidence.

Each of the undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

Each of the Practitioners at Customer Number 22195 is hereby granted with full power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Steven M. Ruben

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Kimberly A. Florence

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Jian Ni

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
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Reinhard Ebner

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Charles E. Birse



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Steven M. Ruben

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Kimberly A. Florence

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Jian Ni

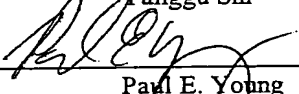
Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Craig A. Rosen

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Gregory A. Endress

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Reinhard Ebner

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Charles E. Birse

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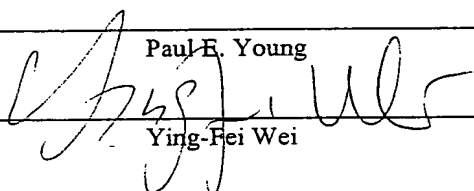
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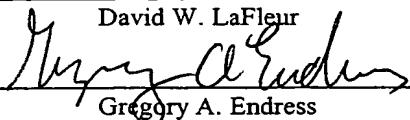
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Each of the undersigned agrees to execute all papers necessary in connection with any interference that may be declared or litigation that may be instituted concerning the application(s) or patent(s) referred to above and to cooperate fully and completely with the Assignee, its successors, assigns, and representatives in obtaining evidence and going forward with such interference or litigation, including providing testimonial evidence.

Each of the undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

Each of the Practitioners at Customer Number 22195 is hereby granted with full power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Steven M. Ruben

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Kimberly A. Florence

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Jian Ni

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Craig A. Rosen

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Kenneth C. Carter

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Paul A. Moore

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Henrik Olsen

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Yanggu Shi

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Paul E. Young

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Ying-Fei Wei

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Laurie A. Brewer

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Daniel R. Soppet

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
David W. LaFleur

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Gregory A. Endress

Inventor's Signature:  \_\_\_\_\_ Date: 02/23/2007  
Reinhard Ebner

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Charles E. Birse